IN THE SPECIFICATION

Please replace the third paragraph beginning at line 13, on page 13 of the application with the following new paragraph:

Fig. 1 illustrates a typical image compression system 100. The data compression system may include three closely connected components namely (a) Transformer 120, (b) Quantizer 130, and (c) Optional Entropy Encoder 140. Output data stream 150 is compressed ~~Compression is accomplished~~ by applying a linear transform to decorrelate the image data 110, quantizing the resulting transform coefficients, and, if desired, entropy coding the quantized values. A variety of linear transforms have been developed which include Discrete Fourier Transform (DFT), Discrete Cosine Transform (DCT), Discrete Wavelet Transform (DWT) and many more, each with its own advantages and disadvantages.

Please replace the second paragraph beginning at line 7, on page 14 with the following new paragraph:

The optional entropy encoder 140 further compresses the quantized values losslessly to give better overall compression. It may use a model to accurately determine the probabilities for each quantized value and produces an appropriate code based on these probabilities so that the resultant output data[code] stream 150 will be smaller than the input stream. The most commonly used entropy encoders are the Huffman encoder and the arithmetic encoder, although for applications requiring fast execution, simple run-length encoding (RLE) has proven very effective.